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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/617,771

07/14/2003

Martin Kralik

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EXAMINER

LEE, EDMUND H

ART UNIT

PAPER NUMBER

1791

NOTIFICATION DATE

DELIVERY MODE

02/15/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

Dbeltran@rmhlaw.com  
LGaughan@rmhlaw.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/617,771	<b>Applicant(s)</b> KRALIK ET AL.	
	<b>Examiner</b> EDMUND H. LEE	<b>Art Unit</b> 1791	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE \_\_\_\_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☐ Claim(s) \_\_\_\_ is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☐ Claim(s) \_\_\_\_ is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

### DETAILED ACTION

1. The finality of the rejection of the last Office action has been withdrawn.
2. Claim 4 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 4 is indefinite because it appears to conflict with base claim 1. Claim 4 recites applying the adhesive to the mat outside of the mold tool, whereas claim 1 recites "applying...adhesive layer to the glass fiber mat *in* second mold half and to the surface-finished component *in* a first mold half." (emphasis added)

Correction is required.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8 and 13-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith (USPN 3873654) in view of Carter et al (USPN 3923421). In regard to claim 1, Smith teaches all of the claimed limitation (col 2, lns 17-42; col 3, lns 61-65; col 4, ln 15-col 5, ln 8; and figs 1-3) except using a spacer part being a honeycomb structural part, wherein its open ends face the finished surface component and a glass mat, and closing the first and second mold halves to diffuse the adhesive into the open ends of the hollow chambers of the spacer parts. Smith also teaches using a foam core as part of an airfoil or helicopter blade, wherein the fiberglass skins, adhesive layers/epoxy, and

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foam spacer part are compressed together into intimate and positive contact (col 2, Ins 17-42; col 3, Ins 61-65; col 4, ln 15-col 5, ln 8; col 5, Ins 5-10; and figs 1-3). Carter et al teach using a honeycomb foam core spacer layer to form a lightweight, rigid helicopter blade, wherein the honeycomb foam spacer layer is sandwiched between a skin assembly of fiber glass (col 2, Ins 13-19; fig 2). Smith and Carter et al are combinable because they are analogous with respect to molding helicopter blades having a foam core. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the honeycomb foam spacer layer of Carter et al as the foam core of Smith in order to produce a lightweight blade without compromising strength and rigidity. It should be noted that the use of the honeycomb foam core spacer layer of Carter et al in the process of Smith would subject the honeycomb foam core spacer layer to the compressing step where the fiberglass skins, adhesive layer/epoxy, and spacer layer are brought into intimate and positive contact, i.e., the adhesive layer/epoxy would diffuse into the open ends of the hollow chambers of the honeycomb foam core spacer layer. In regard to claim 2, the use of a preshaped, deep drawn component to form a molded composite is well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a pre-shaped, deep drawn component in the process of Smith in order to reduce cycle time. In regard to claim 3, Smith teaches using a second glass fiber mat (col 4, Ins 15-35). The placement of the second mat on the spacer before inserting the spacer into the molding tool is a mere obvious matter of choice. Further, the placement of a film on a preform before insertion of the preform into a mold is well-known in the

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molding for reducing cycle time. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the second mat of Smith on the spacer part of Smith before inserting the spacer part into the molding tool in order to reduce cycle time. In regard to claim 4, the application of adhesive to a horizontal preform layer outside of a mold is well-known in the molding art as a way to reduce molding complexity and improve efficiency. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to apply the adhesive of Smith to the horizontal fiberglass of Smith while outside of the mold in order to attain the above benefits. In regard to claim 5, such is well-known in the molding art in order to reduce cycle time and provide accurate cuts. See class 264, subclass 163. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to cut the peripheral area of the mat of Smith by a punch located at the claimed location in order to reduce cycle time and provide accurate cuts. In regard to claim 6, the use of a specific apparatus is a mere obvious matter of choice dependent on equipment availability and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed apparatus is well-known in the molding art. See class 264, subclass 163. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed apparatus in the process of Smith in order to reduce cycle time and provide accurate cuts. In regard to claims 7 and 8, the use of a specific apparatus is a mere obvious matter of choice dependent on equipment availability and of little patentable consequence to the claimed process since it is not a manipulative feature or

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step of the claimed process. Further, the claimed spray apparatus of claims 7 and 8 are well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed apparatus in the process of Smith in order to reduce cycle time. In regard to claims 13-14, the use of a specific material is a mere obvious matter of choice dependent on the desired final product and of little patentable consequence to the claimed process since it is not a manipulative feature or step of the claimed process. Further, the claimed material is well-known in the molding art. Thus, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the claimed material in the process of Smith in order to produce diverse products having desired characteristics.

5. Applicant's arguments with respect to claims 1-8 and 13-14 have been considered but are moot in view of the new ground(s) of rejection.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. the following US patents teach using a honeycomb spacer layer between skin layers: 4557961, 3782856, 6776865.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to EDMUND H. LEE whose telephone number is 571.272.1204. The examiner can normally be reached on MONDAY-THURSDAY FROM 9AM-4PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Johnson can be reached on 571.272.1176. The fax phone

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number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

EDMUND H. LEE  
Primary Examiner  
Art Unit 1791

EHL

/EDMUND H. LEE/  
Primary Examiner, Art Unit 1791